Application No.: 10/057,819 2 Docket No.: 06920/000K227-US0

AMENDMENTS TO THE CLAIMS

(Currently amended) A mechanical persistent current switch comprising:
<u>a</u> bulk member made of <u>a</u> <u>an</u> RE-Ba-Cu-O superconductor, RE representing a rare earth element; and,

connector material; wherein the said bulk member made of RE-Ba-Cu-O superconductor is made by a melt process in which resin is including fillers having a low thermal expansion coefficient in a dispersed manner are impregnated, and the

connector material with an electrical forming a current terminal and a voltage terminal on the said bulk member, wherein the contacting surfaces of the connector material are polished, and a direction of current is parallel to the ab surface by making the contact surface of the connector material perpendicular to the ab surface of the connector material.

Claims 2-4. Canceled.

5. (Withdrawn) A method of using a mechanical persistent current switch according to claim 1 having a pre-treatment of passing currents above the critical value until the ohmic resistance behavior appears prior to using the mechanical persistent current switch.